**Decision making process for NSW Health Response Protocol - Managing Pathogen Risks in Drinking Water**

**E. coli detected in drinking water OR Total coliforms detected in drinking water**

- **Check disinfection, treatment, source and supply system are normal. Rectify if necessary.**
  - **Check disinfection, treatment, source and supply system are normal. Rectify if necessary.**
  - **Resume normal monitoring. Consider system specific total coliform targets.**

- **Evidence of vermin in reservoir**
  - **Check chlorine residual in the distribution system downstream from reservoir AND Contact local PHU**
  - **Wait for repeat sample.**
  - **Disinfection, treatment, source and supply system normal?**
    - **Yes**
      - **Resume normal monitoring.**
      - **Consider system specific total coliform targets.**
    - **No**
      - **Evidence of vermin in reservoir**
        - **Consult local PHU to determine need for a boil water alert**
          - **PHU will contact Water Unit and consider the outcomes of the investigation/risk assessment.**
          - **PHU will consider findings of the water utility investigation**
            - Including sanitary survey results, performance of treatment processes and any other problems within the supply system.

- **Critical limit exceeded OR Raw water quality problem**
  - **Has a critical limit been exceeded?**
    - **Yes**
      - **Immediately contact local PHU**
    - **No**
      - **Has the situation been corrected or controlled?**
        - **Yes**
          - **Resume normal operation and monitoring.**
        - **No**
          - **Investigate, rectify failures Include additional sampling as necessary. Advise local PHU**

- **Immediate resample, investigate, increase disinfection (if inadequate) AND Contact local PHU**
  - **Resume normal operation and monitoring.**

- **Raw water quality problem**
  - **Wait for repeat sample.**
  - **E. coli detected?**
    - **Yes**
      - **Resume normal monitoring.**
    - **No**
      - **E. coli detected in repeat sample?**
        - **Yes**
          - **Resume normal monitoring.**
        - **No**
          - **Consult local PHU to determine need for a boil water alert**
            - **PHU will contact Water Unit and consider the outcomes of the investigation/risk assessment.**
            - **PHU will consider findings of the water utility investigation**
              - Including sanitary survey results, performance of treatment processes and any other problems within the supply system.